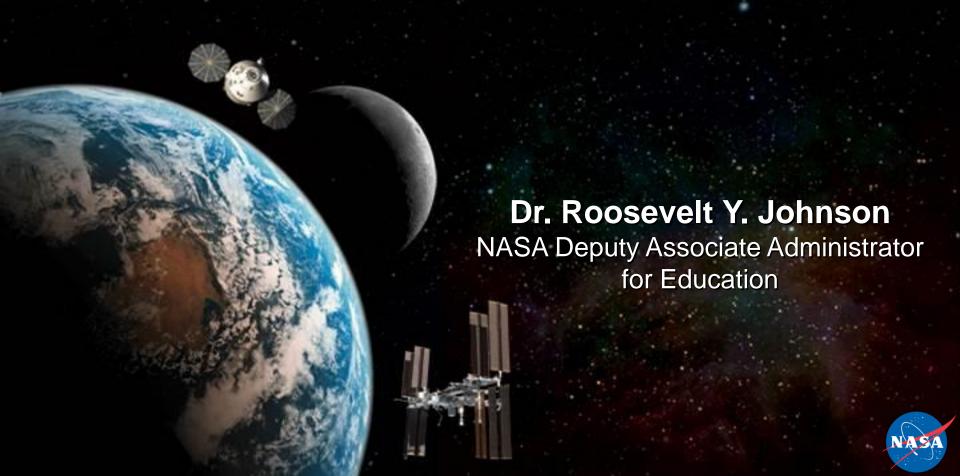
### NASA Education

Inspiring and Engaging
Tomorrow's Space Explorers



### NASA is More Than Astronauts...



Educator



Space Farmer



**Astronaut** 



Microbiologist



Spacesuit Designer



Robotics Instructor



Engineer



Scientist



Payload Communicator

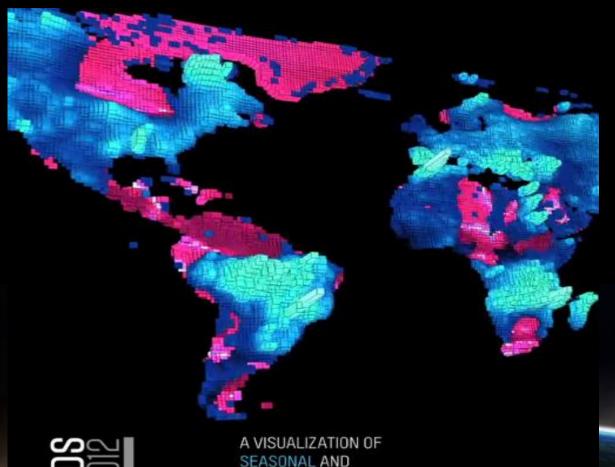
#### **Earth Science at NASA**

#### Goal:

To understand the changing climate, its interaction with life, and how human activities affect the environment.



### **GRACE Satellites and Groundwater Reserves**



A visualization of global groundwater depletion created using data from NASA's GRACE mission has premiered on New York's Times Square to mark World Water Day 2012.



A VISUALIZATION OF SEASONAL AND LONGTERM CHANGES IN GROUNDWATER LEVELS

HEADSUP2012.COM

### NASA EDUCATION

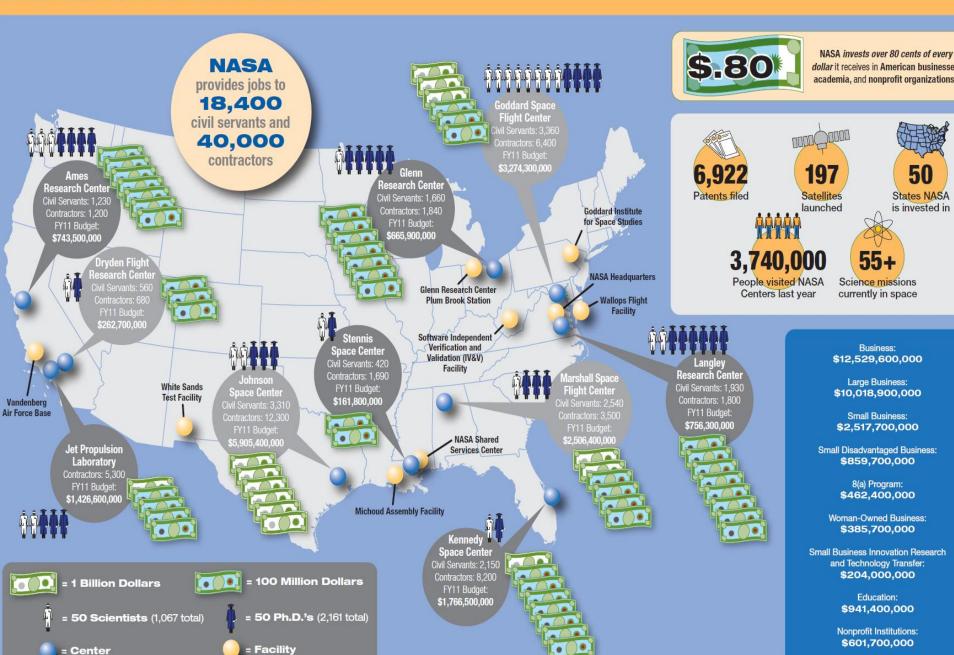


Vision Statement:
To advance high quality STEM education using NASA's unique capabilities





#### NASA Investment in the Nation



States NASA

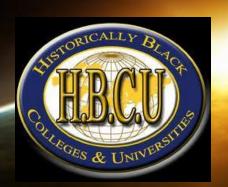
is invested in

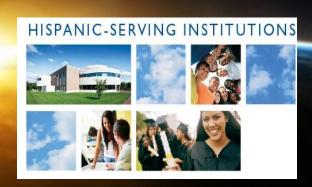
All information based on FY11 actuals

### STEM Education Programs... Diversity is Key

Minority University Research and Education Program (MUREP)

- •Engages underrepresented populations through a variety of initiatives.
- Recruits underrepresented and underserved students in STEM disciplines through completion of undergraduate or graduate degrees
- •Works with Historically Black Colleges and Universities, or HBCUs; Hispanic Serving Institutions, or HSIs; and Tribal Colleges and Universities, or TCUs



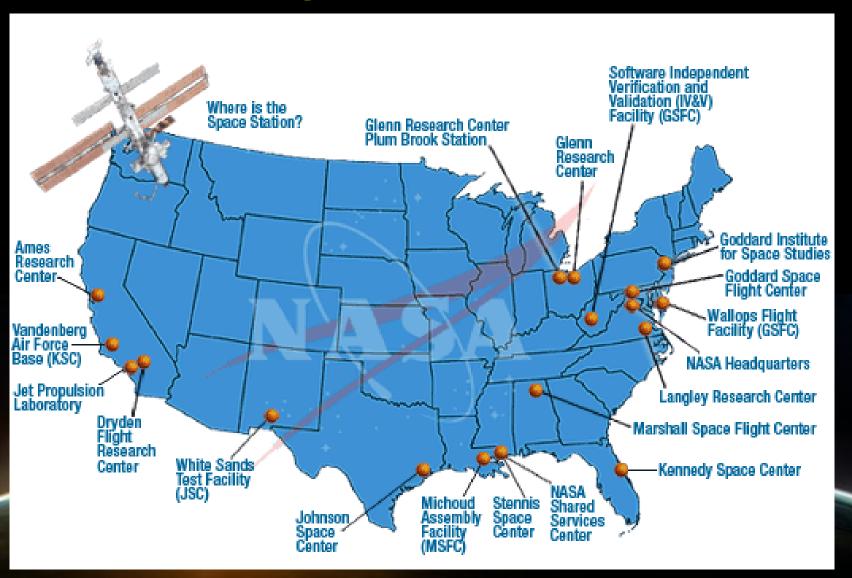




## NASA Internships, Fellowships and Scholarships



### NASA Internship, Fellowship and Scholarship Locations in the U.S.



### **NASA Pathways Programs**



http://www.nasajobs.nasa.gov/studentopps/default.htm

#### **International Space Apps Challenge**

111 orgs, 25 cities, 17 countries, 2,083 people, 71 challenges, 100+ solutions in 48 hours





GrowersGuide <

Where are you looking to grow!











Planet Hopper

ExoAPI





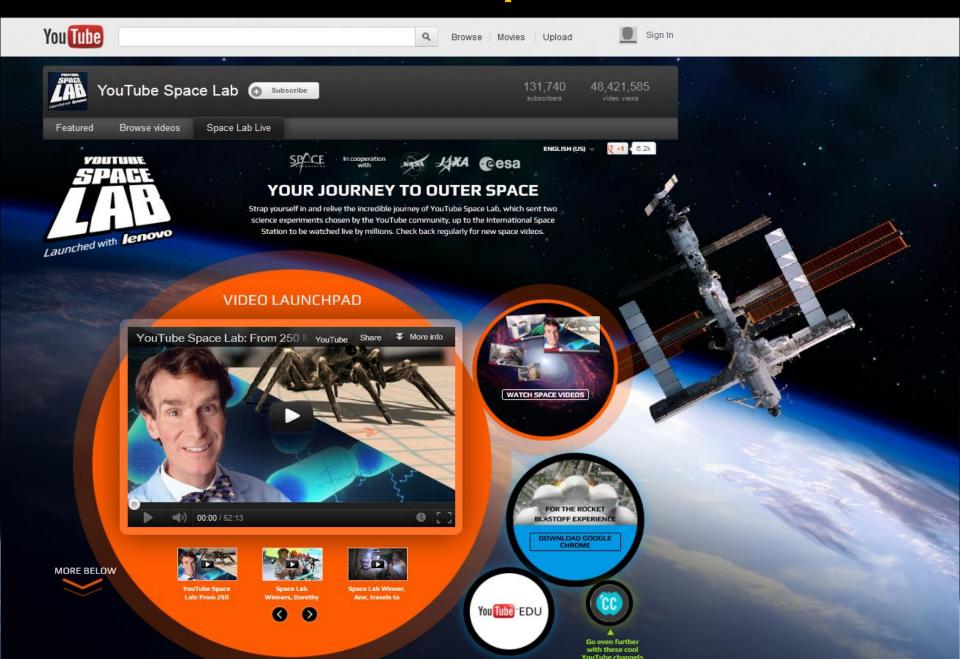
Astro-ornaments







### YouTube Space Lab





## Winning Experiments on YouTube Space Lab



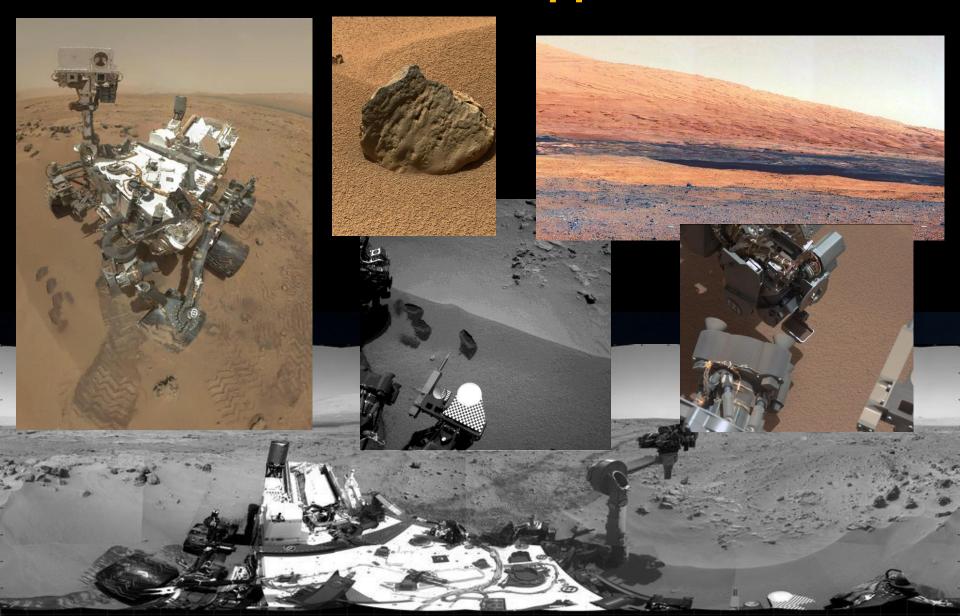




### **U.S. and EU SPHERES Competition**



# MSL: A New Era of Exploration and STEM Education Opportunities



#### **Social Media + NASA Missions = Student Engagement**



4,715

Government Organization

NEEMO-- the NASA Extreme Environment Mission Operations

-- Follow along as 4 NASA crew members, called aquanauts, live in Aquarius, the world's onlyundersea laboratory.

\*NASA Facebook: 1,212,026 "Likes"

\*NASA Students Facebook: 6,975 "Likes"

NASA Extreme Environment
Mission Operations (NEEMO)
16 Crew on FB and Twitter

#### **NASA Missions Inspire Spinoffs... Benefiting Society**



**Cordless Tools** 



**CAT Scanners** 



**Mammograms** 



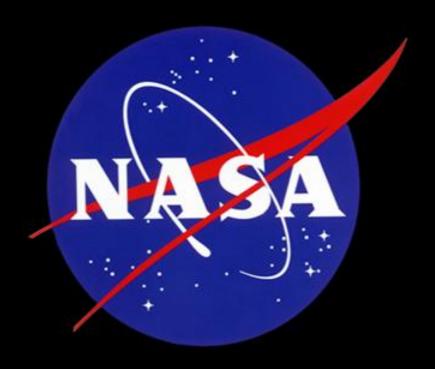
**Invisible Braces** 



**Smoke Detectors** 

Memory Foam





http://www.nasa.gov